



A PROBE INTO THE EFFECT OF KASTURBA GANDHI BALIKA VIDYALAYA (KGBV) SCHEME AS A CATALYST TO ACADEMIC MOTIVATION OF THE FEMALE LEARNERS

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ABSTRACT

Kasturba Gandhi Balika Vidyalaya (KGBV) scheme acts as an extrinsic intervention. To study the effect of Kasturba Gandhi Balika Vidyalaya (KGBV) scheme on academic motivation the research was designed to compare the motivational aspects between the girl-students of the beneficiary of the scheme and their non-beneficiary of the scheme. Data was collected by administering *Motivation Strategies for Learning Questionnaire (MSLQ)* on randomly selected two groups – Study Group ((KGBV) and Reference Group (RG); the number of participants in the two groups were 200 and 247 respectively. In Self-Efficacy, Intrinsic Value, Cognitive Strategy Use, Self-Regulation, and MSLQ in total the KGBV group on an average expressed their significantly higher motivation and in Test Anxiety the result was reversed. Form the result it may be concluded that the KGBV scheme had positive impact in development of academic motivation of the KGBV hostel dwellers.

KEY WORDS: Intrinsic Motivation, Extrinsic Motivation, Academic Motivation, Self-Regulation.

1. ACADEMIC MOTIVATION:

Motivation refers to reasons that underlie behaviour that is characterized by willingness and volition. Intrinsic motivation is animated by personal enjoyment, interest, or pleasure, whereas extrinsic motivation is governed by reinforcement contingencies. Motivation involves a constellation of closely related beliefs, perceptions, values, interests, and actions. Motivation within individuals tends to vary across subject areas, and this domain specificity increases with age. Motivation in children predicts motivation later in life, and the stability of this relationship strengthens with age. Traditionally, educators consider intrinsic motivation to be more desirable and to result in better learning outcomes than extrinsic motivation. In general, children appear to enter school with high levels of intrinsic motivation, although motivation tends to decline as children progress through school. Research suggests that motivation can be manipulated through certain instructional practices, although studies demonstrate both positive and negative effects. The use of rewards may either encourage or diminish motivation, depending on the type of rewards and the context in which they are given. Teachers should attempt to give students more autonomy or control over their own learning by allowing them to make choices and use collaborative or cooperative learning approaches. In addition, teachers should create a supportive classroom environment with respect to goal structures, attributions, and external evaluation. There are several challenges to assessing motivation, especially in children. Recommendations for eliciting evidence of motivation for assessment purposes are made.

Extrinsically motivated behaviours are the results of the attainment of externally administered rewards, including pay, material possessions, prestige, and positive evaluations from others. Extrinsic motivation is defined as the performance of an activity because it is perceived to be instrumental in achieving valued outcomes that are distinct from the activity itself (Deci, 1975; Deci & Ryan, 1985, Ji-Won Moon & Young-Gul Kim, 2001). Perceived usefulness is described as a form of extrinsic motivation (Deci, 1975; Deci & Ryan, 1985).

In contrast to extrinsic motivation, intrinsic motivation is said to exist when behaviour is performed for its own sake rather than to obtain material or social reinforcements. Intrinsic motivation refers to the performance of an activity for no apparent reinforcement other than the activity per se (Deci, 1975; Deci & Ryan, 1985; Ji-Won Moon & Young-Gul Kim, 2001). Perceived ease of use is a form of intrinsic motivation (Deci, 1975; Deci & Ryan, 1985). Perceived ease of use has also been found to influence usage indirectly through perceived usefulness (Davis, 1986, 1989) and perceived enjoyment (Igbaria et al., 1995).

More recently in the literature of psychology, intrinsically motivated behaviour is alleged to derive from and satisfy innate psychological needs, including needs for competence and autonomy (Deci & Ryan, 1985; Kasser & Ryan, 1996). According to Deci (1980), perceptions of personal (as opposed to external) control satisfy these needs, and constitute the fundamental feature distinguishing intrinsically motivated behaviour from extrinsically motivated behaviour. The concept of intrinsic motivation evolved independently of and subsequent to the behaviourist tradition of extrinsic contingencies. But the two met with a bang when Deci (1971) argued based on his laboratory results not only that extrinsic

reinforcement is not needed for motivation, but also that tangible rewards actually undermine intrinsic motivation for interesting activities. Since this publication, the use of extrinsic rewards to alter human behaviour has been challenged in literature reviews, textbooks, and the popular media. Deci (1980) elaborated his original findings via his cognitive evaluation theory, which held that the impact of extrinsic rewards on motivation depends on the receiver's interpretation of the rewards. In accordance with the self-perception theory and the over justification effect (Lepper, Greene, & Nisbett, 1973), when people attribute their behaviours to external rewards they discount interest as causes of their behaviours and consequently intrinsic motivation becomes lower. Extrinsic rewards, particularly highly contingent rewards, are said to be salient to people and likely to generate external attributions, perceptions that they are responding to environmental control rather than autonomously and lower intrinsic motivation. A number of scholars and theoretical perspectives have maintained that the effects of extrinsic and intrinsic rewards are not interactive, but generally additive (Porter & Lawler, 1968; Staw, 1979; Mawhinney, 1990), rewards generally increase perceived self-determination. As with other aspects of human behaviour, to understand intrinsic and extrinsic motivation the person and the environment must be considered jointly.

1.1 Kasturba Gandhi Balika Vidyalaya Scheme as an Extrinsic Motivator:

In Kasturba Gandhi Balika Vidyalaya scheme hostels are set up annexed to the schools in educationally backward blocks of the country. These hostels cover hard to reach girls especially the deprived ones belonging predominantly to the SC, ST, OBC community and minority groups. This is an extrinsic intervention for girls residing in small and scattered habitations far off from the nearest school, who have remained outside the educational system despite interventions of other government programmes due to persistent socio-economic, cultural and topographical reasons.

1.1 Objective of the Study:

The objective of the study was to ascertain the effect of Kasturba Gandhi Balika Vidyalaya (KGBV) scheme as a stimulator to the academic motivation of the female learners. Actually effect of the scheme was assessed by comparing academic motivation of the learners of the beneficiary group with the non-beneficiary group.

2. DESIGN OF THE STUDY:

The present study was carried out through descriptive survey method within ex-post-facto research design. The details regarding sample, tool, procedure of data collection and statistical technique are reported hereunder.

2.1 Variables:

In the present study following variables were considered.

2.1.1 Independent Variable:

In the present study "independent variable" was the Kasturba Gandhi Balika Vidyalaya (KGBV) scheme. Here two levels were considered – (a) beneficiary of the scheme (study group) and (b) non-beneficiary of the scheme (reference group).

2.1.2 Dependent Variable:

The “Dependent Variables” in the present study was academic motivation.

2.2 Sample:

By applying stratified random sampling technique 200 KGBV hostel dwellers and 247 day scholar (female learners) were selected from randomly selected 10 KGBV hostel containing Government/Government Sponsored/Government Aided Secondary/Higher Secondary Schools of randomly selected 8 districts of West Bengal.

2.3 Tool Used:

To assess students' motivational orientations and their use of learning strategies **Motivated Strategies for Learning Questionnaire (MSLQ)** (Pintrich & De Groot, 1990) was used as research tool in the present study. In this test there are 44 statements and with each statement a 7 point Likert type scale is attached. The manual of the test reports that the analysis of the motivational items revealed three distinct motivational factors – *self-efficacy, intrinsic value, and test anxiety*. Again on the basis of the results of the factor analysis, two cognitive scales were constructed – *cognitive strategy use* and *self-regulation*.

- The **Self-Efficacy scale** consisted of nine items regarding perceived competence and confidence in performance of class work (Eccles, 1983; Schunk, 1981).
- The **Intrinsic Value scale** was constructed by taking the mean score of the student's response to nine items concerning intrinsic interest in and perceived importance of course work (Eccles, 1983) as well as preference for challenge and mastery goals (Harter, 1981).
- Four items (Liebert & Morris, 1967) concerning worry about and cognitive interference on tests was used in the **Test Anxiety scale**.
- The **Cognitive Strategy Use scale** consisted of 13 items pertaining to the use of rehearsal strategies, elaboration strategies such as summarizing and paraphrasing, and organizational strategies (Weinstein et al., 1987).
- The scale, labelled **Self-Regulation** consisted of 9 items, was constructed from meta-cognitive and effort management items. The items on meta-cognitive strategies, such as planning, skimming, and comprehension monitoring were adapted from Weinstein et al. (1987) and Zimmerman and Pons (1986). Effort management strategies were adapted from Zimmerman and Pons (1986) and included students' persistence at difficult or boring tasks and working diligently.

Clearly the domains of this test consist of unequal number of items. The domain and total scores of each domain were made comparable by summing the item responses in a domain and dividing it by the number of total items of the domain. Then therefore, for each domain the maximum average score is 7, the minimum is 1 and the mid value is 4.

2.4 Procedure for Data Collection:

The Head of the institutes were contracted for his/her permission to allow collecting the data. The relevant data on different constructs were collected by administering the above-mentioned tool on the subjects under study in accordance with the directions provided in the manual of the tool.

2.5 Statistical Techniques:

Verification of group differences with respect to each aspect between the two groups under study was done by the independent samples “t”-test with the help of SPSS 20.0.

3. RESULTS:

Results related to the comparison between the female students of the study group (i.e. KGBV) and reference group (RG) in **Motivated Strategies for Learning Questionnaire (MSLQ)** scores of are presented herewith in table-3.1(a) and table-3.1(b) as well as figure-3.1.

Table-3.1(a): Group Statistics of Scores on Different Facets of Motivated Strategies for Learning Questionnaire (MSLQ) of the Female Students of the Study Group (i.e. KGBV) and Reference Group (RG)

Academic Motivation	Type	N	Mean
Self-Efficacy	KGBV	200	5.36
	RG	247	5.09
Intrinsic Value	KGBV	200	5.46
	RG	247	5.12
Test Anxiety	KGBV	200	3.64
	RG	247	4.00
Cognitive Strategy Use	KGBV	200	5.80
	RG	247	5.48
Self-Regulation	KGBV	200	5.66
	RG	247	5.37
MSLQ	KGBV	200	5.18
	RG	247	5.01

Table-3.1(a) shows the group statistics of the scores of different facets of the **Motivated Strategies for Learning Questionnaire (MSLQ)** of the female students of the study group (KGBV) and reference group (RG).

Figure-3.1 shows the bar diagram of means of scores of different facets of **Motivated Strategies for Learning Questionnaire (MSLQ)** of female students of the study groups (i.e. KGBV) and reference group (RG).



Figure-3.1: Bar Diagram of Mean of the scores in Different Facets of Motivated Strategies for Learning Questionnaire (MSLQ) of Female Students of Study Group (KGBV) and Reference Group (RG)

Table-3.1(b): Results of Independent Samples Test of Type Wise Comparison of Means of Scores of Different Facets of Motivated Strategies for Learning Questionnaire (MSLQ) of the Female Students of the Study Group (i.e. KGBV) and Reference Group (RG)

Academic Motivation		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Self-Efficacy	Equal variances assumed	4.770	445	0.000
	Equal variances not assumed	4.766	424.280	0.000
Intrinsic Value	Equal variances assumed	4.686	445	0.000
	Equal variances not assumed	4.634	404.661	0.000
Test Anxiety	Equal variances assumed	-5.699	445	0.000
	Equal variances not assumed	-5.670	416.652	0.000
Cognitive Strategy Use	Equal variances assumed	5.073	445	0.000
	Equal variances not assumed	5.047	416.720	0.000
Self-Regulation	Equal variances assumed	4.193	445	0.000
	Equal variances not assumed	4.165	413.712	0.000
MSLQ	Equal variances assumed	3.232	445	0.001
	Equal variances not assumed	3.215	416.725	0.001

From table-3.1(b) it is observed that the two groups (KGBV & RG) differed highly (statistically) significantly in each of the five facets of **Motivated Strategies for Learning Questionnaire (MSLQ)** as well as in **Motivated Strategies for Learning Questionnaire (MSLQ) score in total**. In Self-Efficacy, Intrinsic Value, Cognitive Strategy Use, Self-Regulation, and MSLQ in total the KGBV group on an average expressed their (statistically) significantly higher motivation and in Test Anxiety the result was reversed.

4. DISCUSSION ON THE RESULTS COMPARATIVE ANALYSIS IN ACADEMIC MOTIVATION:

Table-3.1(a) shows the group statistics of the scores of different facets of the **Motivated Strategies for Learning Questionnaire (MSLQ)** of the female students of the study group (KGBV) and reference group (RG).

In **Self-Efficacy** the mean of KGBV and RG were 5.36 and 5.09 respectively; in **Intrinsic Value** the mean of KGBV and RG were 5.46 and 5.12 respectively; in **Test Anxiety** the mean of KGBV and RG were 3.64 and 4.00 respectively; in **Cognitive Strategy** the mean of KGBV and RG were 5.80 and 5.48 respectively; in **Self-Regulation** the mean of KGBV and RG were 5.66 and 5.37 respectively; and finally, in **MSLQ in totality** the mean of KGBV and RG were 5.18 and 5.01 respectively.

From table-3.1(b) it is observed that the two groups (KGBV & RG) differed highly (statistically) significantly in each of the five facets of **Motivated Strategies for Learning Questionnaire (MSLQ)** as well as in **Motivated Strategies for Learning Questionnaire (MSLQ) score in total**. In **Self-Efficacy, Intrinsic Value, Cognitive Strategy Use, Self-Regulation, and MSLQ in total** the KGBV group on an average expressed their (statistically) significantly higher motivation and in **Test Anxiety** the result was reversed.

- a) In case of the **Self-Efficacy** the mean value for the female students of the Study Group (i.e. KGBV) was **5.36** and for the female students of the Reference Group (RG) was **5.09**. The first value was (statistically) significantly higher than the second value. This reflects that the perceived competence and confidence in performance of class work was higher in KGBV students than the female learners of the Reference Group. ***This may be the positive impact of the KGBV scheme in development of self-efficacy of the female learners coming from the weaker section of the society.***
- b) In case of the **Intrinsic Value** the mean value for the female students of the Study Group (i.e. KGBV) was **5.36** and for the female students of the Reference Group (RG) was **5.13**. The first value was (statistically) significantly higher than the second value. This reflects that the intrinsic interest in and perceived importance of course work as well as preference for challenge and mastery goals was high in the female learners of the KGBV group than that of RG. ***This may be the positive influence of the KGBV scheme in development of intrinsic value of the female learners coming from the weaker section of the society.***
- c) In the **Cognitive Strategy Use** the mean value for the female students of the Study Group (i.e. KGBV) was **5.80** and for the female students of the Reference Group (RG) was **5.48**. The first value was (statistically) significantly higher than the second value. This reflects that the use of rehearsal strategies, elaboration strategies such as summarizing and paraphrasing, and organizational strategies was higher in the female learners of the KGBV group than that of RG. ***This may be the positive influence of the KGBV scheme in development of Cognitive Strategy Use of the female learners coming from the weaker section of the society.***
- d) In **Self-Regulation** the mean value for the female students of the Study Group (i.e. KGBV) was **5.66** and for the female students of the Reference Group (RG) was **5.38**. The first value was (statistically) significantly higher than the second value. This reflects that the meta-cognitive strategies, such as planning, skimming, and comprehension monitoring and effort management strategies, such as, persistence at difficult or boring tasks and working diligently were higher in the female learners of the KGBV group than that of RG. ***This may be the positive influence of the KGBV scheme in development of self-regulation of the female learners coming from the weaker section of the society.***
- e) In **MSLQ in totality** the mean value for the female students of the Study Group (i.e. KGBV) was **5.18** and for the female students of the Reference Group (RG) was **5.02**. The first value was (statistically) significantly higher than the second value. This reflects that the academic motivation was higher in the female learners of the KGBV group than that of RG. ***This may be the positive influence of the KGBV scheme in development of academic motivation in totality of the female learners coming from the weaker section of the society.***
- e) In **Test Anxiety** the mean value for the female students of the Study Group (i.e. KGBV) was **3.64** and for the female students of the Reference Group (RG) was **4.00**. The second value was (statistically) significantly higher than the first value. This reflects that the concerning worries about and cognitive interference on tests and examinations were higher in the female learners of the Reference Group than that of KGBV Group. Anxiety generally is detrimental to the well being. The female learners of the KGBV group had to struggle more for their survival; but after having a chance to be admitted to the school and to continue education they might be equipped to manage test anxiety. ***This may be again the positive impact of the KGBV scheme in development of academic motivation in totality of the female learners coming from the weaker section of the society.***

To predict academic performance researchers have predominantly focused on stable traits, abilities, and behaviours of the learners. According to **Zimmerman (1990)**, **Zimmerman and Schunk (1989)**, and **Rotgans and Schmidt (2010)** the self-regulated learning literature represents the approach that has focused specifically on the manner in which students engage with academic tasks and material and has sought to shed further light onto both the determinants of academic performance and the processes of learning.

Students who engage in self-regulated learning are defined by Zimmerman (1990) as the meta-cognitively, motivationally, and behaviourally active participants in their learning. The three components of self-regulated learning are (a) meta-cognitions, (b) motivations, and (c) behaviours. These are assumed to be important determinants of learning and hence academic performance. The effects of meta-cognition and motivations on academic performance are typically presented as being mediated through learning behaviours (**Duncan & McKeachie, 2005**). Meta-cognition and appropriate motivations result in the use of appropriate learning strategies. In turn, these have positive impact on academic performance.

Motivated Strategies for Learning Questionnaire (MSLQ, **Pintrich, Smith, Garcia & McKeachie, 1991**) is a single measure designed to assess task-specific cognitions and motivations as well as the learning strategies used by students to engage with that task. The MSLQ subscales tap context-specific student traits and behaviours by comparing the utility of the MSLQ subscales for predicting course specific performance to their utility for predicting general academic performance.

The research work of **Das, Salam and Adhikari (2013)** showed that the KGBV scheme seemed to be effective in making the deprived group to rise up to the level of general group in case of **Self Efficacy** and **Intrinsic Value**.

5. CONCLUSION:

In comparison with the Reference Group the KGBV group expressed the higher perceived competence and confidence in performance of class work (**self-efficacy**); the intrinsic interest in and perceived importance of course work as well as preference for challenge and mastery goals (**intrinsic value**); the use of rehearsal strategies, elaboration strategies such as summarizing and paraphrasing, and organizational strategies (**cognitive strategy use**); the meta-cognitive strategies, such as planning, skimming, and comprehension monitoring and effort management strategies, such as, persistence at difficult or boring tasks and working diligently (**self-regulation**); and the **academic motivation** in totality. But in comparison with the Reference Group the KGBV group expressed the relatively lower worries about and cognitive interference on tests and examinations (**test anxiety**).

This fact may reflect the positive impact of the KGBV scheme in development of academic motivation in self-efficacy, intrinsic value, cognitive strategy use, self-regulation and management of test anxiety of the KGBV hostel dwellers.

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